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A Qualitative Study: Hypertension Stigma Among Black Women

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Abstract

Background: The prevalence of hypertension (HTN) in Blacks is among the highest in the world. For Black women, 46% experience Stage 2 HTN (blood pressure [BP] ≥ 140/90) as compared to 42% of Black men. Because of higher rates of Stage 2 HTN, Black women have greater rates of cardiovascular disease and stroke. For reasons unknown, nonadherence to lifestyle modifications and anti-hypertensive medications continue. An understudied potential factor associated with poor adherence to the treatment regimen and negative health outcomes is stigma.

Objective: The aim of this study was to gain insight and describe the psychological factor of stigma as an influence on poorly controlled HTN in Black women.

Methods: Hypertensive Black women attending a 6-week self-management program were invited to participate in an open-ended questionnaire. Six groups were held with 62 women aged 24 to 70 with group size ranging from 10 to 15. Women anonymously wrote their answer to two questions to capture individual responses without group persuasion. Data were analyzed using thematic analysis.

Results: Five themes were generated inductively from the data and included 1) desire to get control, 2) shame and embarrassment, 3) obesity characterizations, 4) stereotype threats, and lastly, 5) disrupted normality. During member checking, younger participants were more vocal about stigma whereas older participants did not view stigma as problematic.

Conclusions: Hypertension stigma could potentially deter adherence to high BP treatment. Further research is needed to explore the prevalence of stigma in this population and its impact on behaviors that hinder BP control.

Keywords

stigma; hypertension; Black women; stereotype threats; qualitative

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In the United States, cardiovascular disease (CVD) is the leading cause of death for women, particularly Black women,[1] and hypertension (HTN) is the main risk factor for CVD.[2] The prevalence of HTN in Blacks is among the highest in the world, exceeding other racial/ethnic groups.[2] In Blacks, high blood pressure (BP) is pervasive where a greater percentage of Black women (46%) have Stage 2 HTN (BP ≥ 140/90) than Black men (42%), while more Black men (59%) tend to have higher rates of Stage 1 HTN (BP ≥ 130/80) than Black women (56%). Although awareness and treatment of HTN is higher among Black women, HTN control rates are lower than White and Hispanic women[2] contributing to higher morbidity, disability, and mortality rates associated with coronary heart disease, heart failure, stroke, and renal failure.[3] The reason for the high prevalence of HTN in Blacks is not well understood and frequently attributed to diverse causal factors[4] that stem from social determinants of health. These factors include multifaceted historical explanations ranging from culture[5] to socioeconomic status,[6] psychological issues,[7] environmental conditions,[8] and barriers related to health care delivery and access.[9,10]

There is agreement among clinicians and researchers that the major factor to successfully treating and controlling BP is the lack of adherence to prescribed medications,[11] along with diet and physical activity recommendations.[3,12] However, a rarely recognized but harmful factor is the negative effects of stigma on adherence to the antihypertensive treatment regimen. Stigma is not routinely assessed during client-provider interactions nor is it integrated into the educational curriculum of health care providers.[13] Thus, feeling stigmatized by HTN or other chronic diseases may be a hidden factor to consider when adherence is problematic.[14,15]

Effects of Stigma

Stigma is defined as a mark of shame that is borne by an individual because of physical or mental illness setting them apart for prejudice, stereotyping, and discrimination.[16] According to the Centers for Disease Control, stigma is discrimination against certain groups of people[17] and the stress from lifetime discrimination is associated with an increased risk of HTN in Blacks.[18] Exposure to stigma (beliefs) and discrimination (acts) may initially elicit acute physiological and psychological stressors. Physiologically, the sympathetic nervous system ‘fight or flight’ response to chronic exposure to stigma may cause sustained BP elevations that silently damage arteries, while increasing the risk for atherosclerosis leading to myocardial infarction, stroke, and renal disease.[19] Psychologically, stigmatized clients tend to experience a lower self-esteem, embarrassment, blame, and depression,[20] contributing to poorer self-care, social withdrawal, and reduced help seeking behaviors.[21]

Stigmatization that is directed at characteristics such as race, gender, and weight may adversely affect disease prevention and treatment while potentially accelerating disease processes, especially cardiovascular health outcomes.[19] Being Black, female, and oftentimes overweight/obese describes the plight of many with HTN. For Blacks, race-related stressors lead to worse cardiovascular health outcomes than traditional HTN risk factors regardless of socioeconomic status.[22] Until, race-related stressors are identified, denounced, and fair treatment employed, the effects of stigma may continue to result in poor communication

with providers, failure to practice healthy behaviors, nonadherence to medication/treatment, [23] and disease concealment, resulting in poor health outcomes.[15]

Stigma and Hypertension

The World Health Organization and the American Heart Association identify HTN as highly prevalent, but also the most preventable disease that requires lifestyle modifications such as healthy diet, weight management, and moderate levels of physical activity.[2,24,25] Because HTN is preventable in most cases, clients may experience feelings of guilt and shame with thoughts that they are to blame for their chronic condition because of poor lifestyle choices. As a result, perceived public stigma (individual's belief of discrimination and devaluation by others including peers, family, health care providers, and the community) may be evident contributing to self-stigma (internalization of negative stereotypes of others to oneself).[26] Thus, concerns about feeling stigmatized may result in a failure to engage in treatment adherence and self-care practices leading to uncontrolled HTN. Moreover, because HTN is an invisible and incurable disease, some clients may try to conceal their diagnosis from others to avoid judgment and stigmatization.

When examining stigma and HTN from a biological perspective, increased inflammation is another mechanism to consider. Although studies support the inflammatory response in HTN at the cellular level,[27,28] studies also suggest that prolonged exposure to stigmatization related to racism and discrimination is associated with increased inflammation in Blacks. [22,29] As inflammatory processes decrease the body's defenses, the risk for chronic diseases such as HTN, CVD, stroke, diabetes, kidney disease, arthritis, and cancer increase.[30] Of interest is the possibility that stigma could be the driving force for the inflammatory process associated with HTN.

Research pertaining to stigma and HTN are limited. Studies have compared HTN stigma with other chronic diseases. One study[31] compared the stigma experiences of people diagnosed with HIV/AIDS and HTN. People living with HTN had higher internalized stigma (absorption of negative beliefs and attitudes about the disease) and perceived stigma (expect to experience stigma or shame) while those living with HIV/AIDS had higher enacted stigma (experiences of prejudice or discrimination). Findings in another study[32] revealed greater stigma, denial, and diagnosis concealment among diabetic clients when compared to those with HTN. Although the HTN diagnosis was readily accepted, treatment nonadherence was more prevalent due to the asymptomatic nature of the disease.

A multi-center qualitative study of young adults with HTN[33] was conducted to understand their unique perceptions of barriers to HTN treatment and BP control. Study findings revealed that 26% of respondents were shamed by peers, stigmatized for being unhealthy, or concerned about the negative social stigma related to HTN. One annotation made a distinction between people with cancer who get sympathy and support, whereas persons with HTN are faulted for not making better lifestyle choices.

Two studies compared stigma and HTN among racial groups. From a parent study of White and minority men with prostate cancer, racial discrimination and stigma consciousness

(expecting to be stigmatized) of those diagnosed with HTN was tested.[34] For ethnic minorities, the experience of more racial discrimination was associated with a higher diastolic BP and stigma consciousness was associated with greater odds of having HTN. In another study including mostly Black and Hispanic residents with low-income in New York City, spatial stigma (bad neighborhood reputation) was associated with increased systolic and diastolic BP and higher body mass index.[35]

No known studies have investigated stigma among Black women with HTN and there is a paucity of research on stigma specifically related to HTN. Therefore, the purpose of this study is to gain insight and describe the psychological factor of stigma and its potential influence on poorly controlled HTN in Black women, and thus, address this gap in the literature.

Methods

Research Design

The current study was part of a randomized controlled trial aimed to test the effectiveness of a self-management program with interactive technology-enhanced coaching in achieving BP control and adherence to the anti-HTN treatment regimen. One additional goal was added to describe stigma and its possible influence on poor BP control. The current study used a qualitative descriptive design with an open-ended questionnaire due to the lack of research in the area of stigma and Black women with HTN. This design allowed a straight description and complete summary of the HTN stigma phenomenon using participants' language to stay close to the data with low inference.[36] By using the questionnaire method, we avoided dynamics among members in a group setting that would inhibit individuals from expressing their point of view or influence answers given. In a group setting, the fear of being judged, or the need to openly conform to popular opinion may hinder group communication and contaminate the discussion with socially desirable answers. Thus, the use of individual questionnaires has been known to help participants express their feelings more readily.[37]

Participants

A purposeful sample of 90 Black women diagnosed with HTN were recruited primarily from churches and community events in the southeastern United States through flyers, word-of-mouth, meetings, and presentations. Of the 90 enrolled in the study, 83 completed the 6-week self-management program and participated in this sub-study. Those enrolled in the study were 18 to 70 years of age, prescribed anti-HTN medication, and had BP readings greater than or equal to 130/80 but less than 160/100 when screened. According to HTN guidelines, a BP goal of less than 130/80 is recommended for known CVD and reasonable for those without CVD risk. An upper BP of less than 160/100 was chosen to avoid the need for additional medication for BP control.[3] Those with a current pregnancy, self-report of mental illness that interfered with daily functioning, and disease processes such as uncontrolled diabetes, hemodialysis, and stroke with residual effects were excluded from the study. Prior to providing informed consent, the study was explained to participants. Approval for this study was obtained from the University's Institutional Review Board.

Data Collection

A qualitative questionnaire was administered to six groups of women taking part in a larger HTN study and attending a 6-week self-management class held at a local church classroom space. The usual class size ranged from 10 to 16. Only those present at the beginning of class were given the questionnaire and one group was omitted due to time constraints. To maintain anonymity, questions did not ask for identifying information. In an effort to lessen group intimidation, every participant in each group received a questionnaire and was asked to address two questions that included:

1. Who do you talk to about your high blood pressure?
2. Do you believe there is stigma or shame associated with having high blood pressure?

After participants finished writing their answers, papers were collected, and briefly reviewed. Through member checking, participants discussed and verified the main topics and clarified misinformation. Any changes were recorded. These discussions lasted an average of 15 minutes. Field notes were kept during each session by the primary investigator (WMA).

Data Analysis

This study used the Braun and Clarke thematic analysis[38] as a qualitative descriptive approach to identify, analyze, and report themes within data[38] obtained from open-ended questions. An inductive method to analysis was used to ‘give voice’ to participant experiences by letting the data drive the themes in a ‘bottom-up’ approach.[39] We used the six phases of thematic analysis to produce trustworthy findings.[40] In summary, three research team members read all handwritten questionnaire responses several times to achieve familiarization with the data before initial coding. After all data were manually coded line by line, codes were sorted into groups with the same meaning. Potential themes were reviewed by the research team multiple times and discussed until a final consensus was reached to define and name the themes. Meetings were held for reaching consensus on derived themes and after five themes were finalized, excerpts were identified for each theme to produce the report. Because of the qualitative questionnaire data collection method, data saturation could not be determined.

Results

Of the 83 women enrolled in the self-management classes, 62 (74.6%) completed the questionnaire. Because the data were anonmyously collected, descriptive statistics are provided for the entire sample. Ages ranged from 24–70 (mean 54 years) and 56.6% (n=47) were single (never married/separated/divorced/widowed). A large percentage of the sample (73.4%, n=61) had obtained degrees through higher education from community college to graduate school. Over half of the sample (53%, n=44) reported incomes of $55,000 or greater (see Table 1).

From the sample, 40% (n=25) reported the belief that stigma or shame was associated with having high BP. Sixteen percent (n=10) of the overall sample indicated they talked to no one

about their high BP diagnosis. Nearly one-third (32%, n=8) of those in the stigma-believing group were silent about their HTN diagnosis. Of the 60% (n=37) in the non-stigma believing group, the majority (68%, n=25) checked 'no' to the stigma question with no commments. Interestingly, about a third (32 %, n=12) of the non-stigma believing group who checked 'no' to the stigma question included written responses that were similar to those who reported stigma.

After thematic analysis of the open-ended questionnaire items, five themes were generated from the data and included 1) desire to get control, 2) shame and embarrassment, 3) obesity characterizations, 4) stereotype threat, and lastly, 5) disrupted normality. Excerpts from both the non-stigma believing and the stigma-believing participants are noted under each of the five themes listed.

Theme 1: Desire to get control

Control of HTN is the benchmark for lowering CVD morbidity and mortality risks associated with uncontrolled BP.[3] Participant responses revealed a desire to get control of their BP.

In the non-stigma believing group, one participant had not achieved BP control and responded by identifying the obstacle.

> "I feel I should have it under control better. Sleep is the problem."

Participants in the stigma-believing group identified areas that were problematic for BP control leading to frustration in their self-management ability.

> "…I hate that I have it but I'm working on controlling it and a better lifestyle."

> "Weight is causing my issues and if I can stick with a weight lost plan that might help with my blood pressure."

> "It is a feeling of 'why can't you get it together.' I do well with many things but my blood pressure is the one thing that gets me and I don't seem to be able to conquer it."

Theme 2: Shame and embarrassment

Shame and embarrassment are negative emotions that tend to cause emotional distress that may trigger an elevated BP. If these emotions are chronic, major body systems are adversely affected.[41]

In the non-stigma believing group, several participants noted that HTN should be discussed openly with no shame or embarrassment. During member checking, younger participants were vocal about stigma, but older participants did not view stigma as problematic because HTN occurred during older adulthood.

> "No one should be shamed of high blood pressure. They should be very vocal and talk about their pressure."

> "I feel no shame in discussion of high blood pressure."

> "No shame! Because I experienced it later in life!"

In the stigma-believing group, shame was expereinced when taking medication in public. This type embarrassment and unfair treatment from others may contribute to medication nonadherence.[42]

> "…sometimes I have shame about taking my medication in public. People usually stare at the bottles and ask what it is for."

Participants expressed feelings of shame, failure, and discouragement because they were not in control of their health.

> "I feel shame because it shows poor health. I don't take care of myself like I should."

> "Ashamed that I didn't do all I could to help prevent high blood pressure (e.g. eating better, exercising, etc.) before it happened, even though my cardio doctor says there are many contributors to high blood pressure."

> "My thoughts are not taking care of yourself, ex: eating right, exercising, getting the proper rest. Also, high blood pressure can lead to death and generally occurs when you reach a certain age. It's embarrassing to talk about it."

Young adults viewed their 'new normal' as having to live as if they were older due to lifestyle modifications that impacted their ability to enjoy life.[33] Also, being young and overweight seemed to intensify shame.

> "Because of my age, it's embarrassing to talk about having high blood pressure. This illness seems like it's something associated with older people."

> "I feel that because I'm younger and overweight that people judge and I'm embarrassed because I feel ashamed that I have the condition."

Medication side-effects such as frequent urination may exaggerate feelings of shame and contribute to nonadherence.

> "It used to be (shame) when I had the previous high blood pressure pills that had me using the bathroom ongoing before changing (water pills)."

Theme 3: Obesity Characterizations

Obesity characterization describes how participants and others portray overweightness. Obesity is a visible condition where individuals are victims of stigma with negative stereotypes and discrimination[43] that further complicate BP control.

Participants from the non-stigma believing group mentioned how overweight/obesity people are viewed.

> "Initially I did not think that there was (stigma) and still don't but, I can see how some could possibly think so. Some may possibly associate it with being fat and lazy when most of the time that is far from the case."

> "I think people feel that if you are overweight you automatically have high blood pressure. Also, people are uninformed, that is not only with eating foods with sodium."

Comments were similar between the two groups but differed with indirect references to diet and exercise. Another difference was the comment that individuals with HTN are not always overweight.

> "Most people associate high blood pressure with being overweight…"

> "It may only be my perception; however, I believe high blood pressure is associated with slothfulness and gluttony as it is linked in the minds of others to diet and exercise."

> "Most people assume you don't eat a balanced diet. That you are overweight or that additional exercise can often reduce symptoms"

> "Some people think high blood pressure is related to people who eat too much, obese, careless about eating habits. For me, my stigma was I am too small to have high blood pressure."

Theme 4: Stereotype threat

Stereotype threat refers to "the threat of being viewed through the lens of a negative stereotype, or the fear of doing something that would inadvertently confirm that stereotype." An elevated BP is the most harmful effect from stereotype threat.[44]

Because HTN is so prevalent, some participants from the non-stigma believing group stated HTN was the usual norm for Blacks, thus projecting a stereotypical view.

> "No stigma. Most of the people I know have high blood pressure."

> "I believe it is seen as the 'NORM,' especially in the black community."

> "High blood pressure is so common now especially among African Americans that I think I expect most people (AA) have either high blood pressure or diabetes or both."

In the stigma-believing group, stereotype threat was evident as participants mainly reported how others perceived them.

> "Some people think blood pressure is all about the way you eat, some think it is hereditary, others think they don't need medication. My issues are stress, food…"

> "I feel that the stigma comes from people opinions (personal). For example, too much salt or eating unhealthy,"

> "You are eating too much pork."

> "I was to change my diet, especially salt, because I'm African American, I felt I was asked the question. I don't cook or put salt on my food."

> "If you are a man, the stigma is they will not be able to satisfy a woman when having sexual relations."

"Although heredity, the stigma shows lack of taking care of health and can have a significant impact sometime on relationships."

"…hypertension often carries with it the stigma that you are erratic in your temperament."

"I personally don't have shame. I think when you tell someone you have high blood pressure, they assume you are overweight or you don't take care of yourself and that's not always true."

"I feel like people assume you don't care about your health, you are lazy, uneducated, in poverty, never attempt to do better at taking care of yourself."

Theme 5: Disrupted normality

A diagnosis of HTN can be traumatic with lifestyle changes and strict adherence to medication causing a disrupted normality where normal life is replaced with a restricted lifestyle.[45] Although some clients may successfully adjust, others may not resulting in a constant struggle to maintain BP control.

Participants from the non-stigma believing group wanted to be free of their HTN and medication-taking.

"Would just rather to have a normal blood pressure."

"I don't like taking medication."

Similarly, those in the stigma-believing group struggled with their new normality.

"…there are certain foods you can't eat. Activities may be limited…"

"…yet another hindrance, (hindrance/almost like a handicap) - where others have to consider or make provisions for me when we plan things together…"

Discussion

To our knowledge, this is the first study to investigate HTN related stigma in Black women. The main finding is that 40% (n=25) of our sample reported stigma (in areas such as diet, weight, exercise/physical activity, self-care, medication-taking, HTN at a young age, stress, sleep, etc.) that impacted their ability to maintain BP control. Participants described feeling stigmatized for various reasons with statements that reflected self-stigma (e.g. *I feel shame; it's embarrassing; I hate that I have it, why can't you get it together*) and perceived social stigma (e.g. *some people think; most people associate; I think people feel; people judge*). Results from this study provide insight into the effects of stigma, an underexplored phenomenon that has important clinical and research implications.

Almost 75% of study participants were highly educated, middle and upper-income Black women. In the past, it was thought that lower socioeconomic status was the strongest determinant of poor health, but unlike Whites, higher rates of HTN persists among Blacks regardless of socioeconomic status.[46] Hence, when Blacks achieve a higher socioeconomic status, they are not immune to perpetual experiences with stigma, discrimination, and

marginalization that trigger biological processes involving the sympathetic nervous system and inflammatory responses. Thus, race-related stressors are associated with poor cardiovascular health in Blacks more so than traditional HTN risk factors.[22] In our study, stigma included both HTN risk factors and stigmatizing racial stereotypes (e.g. *fat and lazy*; *lazy, uneducated, in poverty*; or *because I'm African American, I felt I was asked the question)* in spite of the high educational status of participants. Thus, further research is needed to improve our understanding of the above associations. It is equally important that assumptions underlying the etiological contributors for the development of HTN in Black women are not based on stereotypes as this can have negative connotations that impact the attainment of BP control.

Five themes associated with stigma-related barriers to treatment adherence and self-care management were identified. In the first theme, women expressed a desire to get control of their BP to ensure a healthy lifestyle. Women attempted BP control efforts on their own without obvious assistance from health care providers. Unlike diabetic clients who have classes, monitoring equipment, and support groups, our health care system has not fully provided or reimbursed for educational programs and equipment for HTN even though self BP monitoring is associated with improved BP control and health benefits.[47] Blacks are disproportionally affected by HTN, however, policy changes have not been implemented to effect positive health outcomes.

Because of the HTN diagnosis, many participants experienced shame and embarrassment accompanied by an element of guilt. Those experiencing guilt were more inclined to feel bad and blame themselves for their HTN because they did not engage in prudent self-care practices. Consequently, the negative emotions of shame, embarrassment, and guilt may serve to exacerbate high BP.[41] In addition, these emotions were expressed by younger adults who considered HTN a disease of older adults. Unlike healthy peers, young adults are now expected to adhere to lifelong treatments.

Obesity characterizations referred mainly to perceived public stigma with participant comments centering on the thoughts and assumptions of others. Some participants seemed to lack awareness that obesity, unhealthy diet, and physical inactivity are HTN risk factors, thus limiting BP control. Similar to HTN, those with obesity are frequently blamed for their condition and stereotyped as lazy, incompetent, and lacking willpower.[48] In fact, one study participant associated obesity with slothfulness and gluttony. Interestingly, HTN stigma is closely related to obesity stigma; in fact, all five themes may apply to both HTN and obesity.

Stereotype threat was evident in both the non-stigma believing and stigma believing groups. In a study with university students, Blacks with higher stereotype threat displayed higher BPs than Whites when performing a cognitive activity where BP increased and remained elevated after a time lapse and subsequent task, thus suggesting the adverse effect of stereotype threat on BP reactivity.[49] Reacting to stereotype threat may lead to negative consequences for health behavior, such as increased stress, decreased trust, avoidance of health care, impaired communication with health care providers, decreased treatment engagement, and medication nonadherence, all of which contribute to uncontrolled BP.[5051,52]

Lastly, study participants struggled with lifestyle changes such as prescribed medications and dietary changes necessary for BP control creating a disrupted normality. Feeling normal when symptoms are nonexistent could make acceptance of HTN difficult. Lifetime dependence on antihypertensive medication may be perceived as a personal weakness carrying stigma and shame. To ensure BP control, it is essential that the disrupted normality becomes a "new normal" with permanent lifestyle changes to ensure desired health outcomes.

Few studies have shown that stigma is associated with HTN in Black clients.[19,34] Hence, we are chartering new territory on how to proactively address stigma in this population. Fortunately, we can borrow interventions from other stigmatized groups with chronic diseases. First, it is essential for health care providers to garner an awareness and understanding of the adverse effects that stigma may have in adopting healthy lifestyle changes among hypertensive Black women. Health care providers must be prepared through training to help clients increase their self-esteem and develop skills to resist stigma.[53] Next, it is imperative that health care providers assess for the presence of HTN related stigma in Black clients, especially if HTN persists with treatment and nonadherence is suspected. Communication is vital to avoid erroneous identification of general causative factors that lack individualistic application. Because stigma is rarely recognized and/or addressed during client-provider interactions,[13] Black women tend to suffer in silence with the effects of internal and social stigma. As noted in this study, nearly one-third (32%, n=8) of those in the stigma-believing group did not discuss their HTN diagnosis with anyone. If stigma is revealed, the psychological distresses associated with it must be addressed through appropriate interventions to break the silence, increase self-care skills, and promote BP control. Lastly and equally important, health care providers must address their own bias and discriminatory behaviors that may unintentionally perpetuate stigma contributing to poor health outcomes in Blacks with HTN.[19]

Strengths and Limitations

This main strength of this study was the written answers to open-ended questions. They provided a personal understanding of HTN related stigma without restriction, thus avoiding the constraints associated with quantitative scales. Several limitations were identified. First, data collection with a qualitative questionnaire was not as rigorous as individual interviews or focus groups and lacked the depth of information obtained with prompts.[54] Although data were already transcribed with participants' written responses, some handwritings were difficult to read and decipher. In addition, participants had different skill levels in expressing their thoughts in writing. Lastly, participants in this sample were highly educated with middle and upper incomes and recruited from one geographical area. Therefore, responses may not be representative of all Black women with HTN.

Conclusion

In this study, 40% of Black women believed stigma impacts HTN. Understanding stigma issues in Black women with HTN is important when considering that stigma could potentially deter adherence and exacerbate problems with high BP. Further research is

needed to explore the prevalence of stigma in this population and its impact on behaviors that hinder BP control.

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References

1. Kochanek KD, Murphy SL, Xu JQ, Arias E. Deaths: Final data for 2017. National Vital Statistics Reports. 2019;68(9).
2. Virani SS, Alonso A, Benjamin EJ, et al. Heart disease and stroke statistics-2020 update: A report from the American Heart Association. Circulation 2020;141:e1–e458. [PubMed: 31887075]
3. Whelton PK, Carey RM, Aronow WS, et al. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. Hypertension. 2018;71(6):e13–e115. [PubMed: 29133356]
4. Fuchs FD. Why do Black Americans have higher prevalence of hypertension?: An enigma still unsolved. Hypertension. 2011;57:379–380. [PubMed: 21300666]
5. Peters RM, Aroian KJ, Flack JM. African American culture and hypertension prevention. West J Nurs Res. 2006;28:831–854. [PubMed: 17056776]
6. Glover LM, Cain-Shields LR, Wyatt SB, Gebreab SY, Diez-Roux AV, Sims M. Life course socioeconomic status and hypertension in African American adults: The Jackson Heart Study. Am J Hypertens. 2020;33(1).
7. Abel WM, Crane PB, McCoy TP. Predictors of depression in Black women with hypertension. Issues Ment Health Nurs. 2014;35:165–174. [PubMed: 24597581]
8. Tomson J, Lip GYH. Blood pressure demographics: nature or nurture … … genes or environment? BMC Med. 2005;3(3).
9. Wexler R, Elton T, Pleister A, Feldman D. Barriers to blood pressure control as reported by African American patients. J Natl Med Assoc. 2009;101(6):597–603. [PubMed: 19585931]
10. Abel WM, Efird JT. The Association between trust in health care providers and medication adherence among Black women with hypertension. Frontiers in Public Health. 2013;1:66. [PubMed: 24350234]
11. Ferdinand KC, Yadav K, Nasser SA, et al. Disparities in hypertension and cardiovascular disease in blacks: The critical role of medication adherence. J Clin Hypertens (Greenwich). 2017;19(10):1015–1024. [PubMed: 28856834]
12. Flack JM, Sica DA, Bakris G, et al. Management of high blood pressure in Blacks: An update of the International Society on Hypertension in Blacks consensus statement. Hypertension. 2010;56:780–800. [PubMed: 20921433]
13. Nyblade L, Stockton MA, Giger K, et al. Stigma in health facilities: Why it matters and how we can change it. BMC Med. 2019;17(25).
14. Sabateé E, World Health Organization. Adherence to long-term therapies: Evidence for action. World Health Organization http://whqlibdoc.who.int/publications/2003/9241545992.pdf. Published 2003 Accessed6/1/2020.
15. Kane JC, Elafros MA, Murray SM, et al. A scoping review of health-related stigma outcomes for high-burden diseases in low and middle-income countries. BMC Med. 2019;17(17).
16. Stangl AL, Earnshaw VA, Logie CH, et al. The Health Stigma and Discrimination Framework: A global, crosscutting framework to inform research, intervention development, and policy on health-related stigmas. BMC Med. 2019;17(31).
17. Center for Disease Control and Prevention. Reducing Stigma. https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/reducing-stigma.html. Published 2020. Accessed 8/14/2020.

18. Forde AT, Sims M, Muntner P, et al. Discrimination and hypertension risk among African Americans in the Jackson Heart Study. Hypertension. 2020;76(3):715–723. [PubMed: 32605388]
19. Panza GA, Puhl RM, Taylor BA, Zaleski AL, Livingston J, Pescatello LS. Links between discrimination and cardiovascular health among socially stigmatized groups: A systematic review. PLoS One. 2019;14(6):e0217623. [PubMed: 31181102]
20. Liu NF, Brown AS, Folias A,E, et al. Stigma in people with type 1 or type 2 diabetes. Clin Diabetes. 2017;35(1):27–34. [PubMed: 28144043]
21. Thornicroft G, Brohan E, Rose D, Sartorius N, Leese M, the INDIGO Study Group. Global pattern of experienced and anticipated discrimination against people with schizophrenia: a cross-sectional survey. Lancet Infect Dis. 2009;373:408–415.
22. Simons RL, Lei M-K, Beach SRH, et al. Discrimination, segregation, and chronic inflammation: Testing the weathering explanation for the poor health of Black Americans Dev Psychobiol. 2018;54(10):1993–2006.
23. de Ridder D, Geenen R, Kuijer R, van Middendorp H. Psychological adjustment to chronic disease. The Lancet. 2008;372(9634):246–255.
24. Carey RM, Muntner P, Bosworth HB, Whelton PK. Prevention and Control of Hypertension. J Am Coll Cardiol. 2018;72(11):1278–1293. [PubMed: 30190007]
25. World Health Organization. A global brief on hypertension: Silent killer, global public health crisis. WHO Press, Geneva, Switzerland World Health Day 2013 https://www.who.int/cardiovascular_diseases/publications/global_brief_hypertension/en/
26. Pattyn E, Verhaeghe M, Sercu C, Bracke P. Public stigma and self-stigma: Differential association with attitudes toward formal and informal help seeking. Psychiatri Services. 2014;65(2):232–238.
27. De Miguel C, Rudemiller NP, Abais JM, Mattson DL. Inflammation and hypertension: New understandings and potential therapeutic targets. Curr Hypertens Rep. 2015;17(1):507. [PubMed: 25432899]
28. Ogura S, Latapati R, Shimosawa T, Nakayama T. Vascular inflammation and hypertension. Austin Journal of Cardiovascular Disease and Atherosclerosis. 2016;3(1):1017.
29. Thames AD, Irwin MR, Breen EC, Cole SW. Experienced discrimination and racial differences in leukocyte gene expression. Psychoneuroendocrinology. 2019;106:277–283. [PubMed: 31029930]
30. Furman D, Campisi J, Verdin E, et al. Chronic inflammation in the etiology of disease across the life span. Nat Med. 2019;25(12):1822–1832. [PubMed: 31806905]
31. Idemudia ES, Olasupo MO, Modibo MW. Stigma and chronic illness: A comparative study of people living with HIV and/or AIDS and people living with hypertension in Limpopo Province, South Africa. Curationis. 2018;41(1):Article 1879.
32. Adams OP, Carter AO. Diabetes and hypertension guidelines and the primary health care practitioner in Barbados: knowledge, attitudes, practices and barriers-A focus group study. BMC Fam Pract. 2010;11(96).
33. Johnson HM, Warner RC, LaMantia JN, Bowers BJ. “I have to live like I’m old.” Young adults’ perspectives on managing hypertension: A multi-center qualitative study. BMC Fam Pract. 2016;17(31):1–9. [PubMed: 26739311]
34. Orom H, Sharma C, Homish GG, Underwood III W, Homish EL. Racial discrimination and stigma consciousness are associated with higher blood pressure and hypertension in minority men. Journal of Racial and Ethnic Health Disparities. 2017;4:819–826.
35. Duncan DT, Ruff RR, Chaix B, et al. Perceived spatial stigma, body mass index and blood pressure: a global positioning system study among low-income housing residents in New York City. Geospatial Health. 2016;11(2):399. [PubMed: 27245795]
36. Neergaard MA, Olesen F, Andersen RS, Sondergaard J. Qualitative description – the poor cousin of health research? BMC Med Res Methodol. 2009;9(52). doi:10.1186/1471-2288-9-52.
37. Acocella I The focus groups in social research: advantages and disadvantages. Quality & Quantity. 2012;46(4):1125–1136.
38. Braun V & Clark V (2012). Thematic analysis In Cooper H, Camic PM, Long DL, Panter AT, Rindskopf D, & Sher KJ (Eds.), APA handbook of research methods in psychology: Vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological. (pp. 57–71). American Psychological Association

39. Cooper H, Camic PM, Long DL, Panter AT, Rindskopf D, Sher KJ, eds. APA handbook of research methods in psychology. Washington, DC: American Psychological Association; 2012 Braun V, Clarke V, eds. Research designs: Quantitative, qualitative, neuropsychological, and biological No. 2.
40. Nowell LS, Norris JM, White DE, Moules NJ. Thematic analysis: striving to meet the trustworthiness criteria. International Journal of Qualitative Methods. 2017;16(1):1–13.
41. Dolezal L, Lyons B. Health-related shame: An affective determinant of health? Med Humanit. 2017;43(4):257–263. [PubMed: 28596218]
42. Naidoo P, Premdutt R. Do challenges still exist amongst HIV/AIDS patients in managing their condition? A cross-sectional study of 297 participants in the Ethekwini Metro of KwaZulu-Natal, South Africa. African Journal of AIDS Research. 2019;18(3):198–204. [PubMed: 31575338]
43. Tomiyama AJ, Carr D, Granberg EM, et al. How and why weight stigma drives the obesity 'epidemic' and harms health. BMC Med. 2018;16(1):123. [PubMed: 30107800]
44. Steele CM. Thin ice: "Stereotype threat" and black college students. The Atlantic Monthly. 1999;284(2):44–47, 50–54.
45. Sanderson T, Calnan M, Morris M, Richards P, Hewlett S. Shifting normalities: interactions of changing conceptions of a normal life and the normalisation of symptoms in rheumatoid arthritis. Sociol Health Illn. 2011;33(4):618–633. [PubMed: 21281314]
46. Williams DR, Neighbors H. Racism, discrimination and hypertension: Evidence and needed research. Ethn Dis. 2001;11(4):800–816. [PubMed: 11763305]
47. Shimbo D, Artinian NT, Basile JN, et al. Self-measured blood pressure monitoring at home: A joint policy statement from the American Heart Association and American Medical Association. Circulation. 2020;142(4):e42–e63. [PubMed: 32567342]
48. Pearl RL, Wadden TA, Hopkins CM, et al. Association between weight bias internalization and metabolic syndrome among treatment-seeking individuals with obesity. Obesity. 2017;25(2):317–322. [PubMed: 28124502]
49. Blascovich J, Spencer SJ, Quinn D, Steele C. African Americans and high blood pressure: The role of stereotype threat. Psychol Sci. 2001;12(3):225–229. [PubMed: 11437305]
50. Daugherty SL, Vupputuri S, Hanratty R, et al. Using values affirmation to reduce the effects of stereotype threat on hypertension disparities: Protocol for the multicenter randomized hypertension and values (HYVALUE) trial. Journal of Medical Internet Research: Research Protocols. 2019;8(3):e12498.
51. Aronson J, Burgess D, Phelan SM, Juarez L. Unhealthy interactions: The role of stereotype threat in health disparities. Am J Public Health. 2013;103(1):50–56. [PubMed: 23153125]
52. Burgess DJ, Warren J, Phelan S, Dovidio J, van Ryn M. Stereotype threat and health disparities: What medical educators and future physicians need to know. J Gen Intern Med. 2010;25(Suppl 2):169–177. [PubMed: 19898908]
53. Jahn DR, Leith J, Muralidharan A, et al. The influence of experiences of stigma on recovery: Mediating roles of internalized stigma, self-esteem, and self-efficacy. Psychiatric Rehabilitation Journal. 2020;43(2):97–105. [PubMed: 31233321]
54. Hanson JL, Balmer DF, Giardino AP. Qualitative research methods for medical educators. Acad Pediatr. 2011;11(5):375–386. [PubMed: 21783450]

Table 1.

Descriptive Statistics, $N = 83$

Participant Characteristics	Mean (Range) or *n* (%)
Age	54 (46, 24–70)
Years dx with HTN	11.01 (1–40)
Marital status	
Single (never married)	22 (26.5%)
Married	36 (43.4%)
Separated/ Divorced	21 (25.3%)
Widowed	4 (4.8%)
Education	
Less than 12th grade	1 (1.2%)
High school graduate	2 (2.4%)
Some comm. College	11 (13.3%)
Graduated comm. college	7 (8.4%)
Some 4-year college	8 (9.6%)
Graduated 4-year college	28 (33.7%)
Some graduate school	2 (2.4%)
Graduated graduate school	24 (28.9%)
Income	
<10,000 – 24,999	11 (13.3%)
25,000 – 54,999	26 (31.3%)
55,000 – >100,000	44 (53.0%)
Refused	2 (2.4%)
Occupational status	
Work full-time	60 (72.3%)
Retired with pension *	16 (19.3%)
Work part-time/not employed	10 (12%)

* Work full-time = 1 and Work part-time = 2